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1. A battery cell, comprising:
a battery cell structure, said battery cell structure defining a receiving area, a positive alignment opening, and a negative alignment opening;
a compressible stack of battery cell elements in said receiving area, said compressible stack of battery cell elements comprising a plurality of positive plates each having a positive tab portion depending outwardly from a periphery, a plurality of negative plates each having a negative tab portion depending outwardly from a periphery, and a nonconductive separator disposed in between said plurality of positive plates and said plurality of negative plates;
and
a cover secured to said battery cell structure covering said receiving area,
said positive alignment opening aligning said positive tab portion of each of said plurality of positive plates, and said negative alignment opening aligning said negative tab portion of each of said plurality of negative plates.
2. The battery cell of claim 1, wherein said cover provides a compressive force to said compressible stack of battery cell elements.
3. The battery cell of claim 1, wherein said receiving area is larger in one or more battery plate growth directions than said compressible stack of battery cell elements.
4. The battery cell of claim 1, wherein said receiving area is smaller one direction than said compressible stack of battery cell elements.
5. The battery cell of claim 1, further comprising one or more apertures on said battery cell structure for receiving a battery electrolyte.



An element sleeve for a compressible stack comprising:
a) defining a cavity for receiving a compressible stack having a height between 10 and 20% of the uncompressed height of the compressible stack;
b) means for compressing the compressible stack to a height of said cavity.

The element sleeve of claim 1, wherein the sleeve is chemically and acid resistant.

The element sleeve of claim 1, wherein the sleeve is shorter than said uncompressed height of the compressible stack by about 20%.

The element sleeve of claim 1, wherein the sleeve includes a cover having a plurality of reinforcing ribs and a plurality of recesses in said cover.

The element sleeve of claim 1, wherein the sleeve has a width and a length greater than the height of said cavity.

The element sleeve of claim 1, wherein the sleeve includes a plurality of reinforcing ribs and a plurality of recesses in said cover.

The element sleeve of claim 1, wherein the sleeve has a length greater than the height of said cavity.

7. The element sleeve of claim 6, wherein the element is electrically conductive and acid resistant.

8. The element sleeve of claim 6, wherein said height of said cavity is smaller than said uncompressed height of the compressible stack of battery elements by about 20%.

9. The element sleeve of claim 6, wherein said means for compressing comprises a cover having a plurality of snap lock tabs mateable with a corresponding plurality of recesses in said body.

10. The element sleeve of claim 6, wherein the compressible stack of battery elements has a width and a length that is smaller than a width and a length of said cavity.

11. The element sleeve of claim 10, wherein said body further comprises a plurality of reinforcing ribs for preventing growth of said width and said length of the compressible stack of battery elements larger than said width and said length of said cavity.



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for mating said cover and said casing.

24. The battery of claim 22, wherein said stack has a width and a length that is smaller than an interior width and an interior length of said cavity.



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26. The battery of claim 22, wherein said an interior height of said casing is smaller than said uncompressed height of said stack by about 20%.